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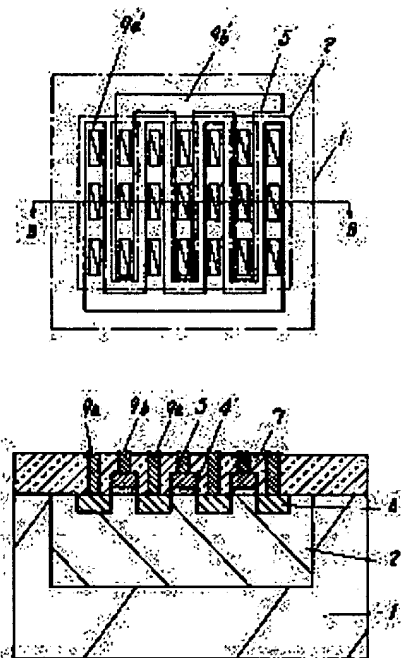
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## (54) MOS CAPACITOR DEVICE

### (57)Abstract:

**PURPOSE:** To obtain a MOS capacitor device capable of firmly following the reference frequency yielded by a crystal oscillator by a method wherein contact electrodes in contact with diffused layers and polycrystalline Si film electrodes are formed into a comb-shape for reduced internal resistance and a smaller time constant.

**CONSTITUTION:** MOS capacitor electrodes 9a', 9b' are shaped into a comb. A P+ diffused region 6' provided in a P+ diffused layer 2 is spread in an elongated flat surface, to be connected by a second layer wiring that is an Al film 9a'. As the contact electrodes are formed in a comb-shape, effective distance is reduced for the P-diffused layer 2 connected to the high potential terminal 9a' of the power source, which causes the internal resistance to decrease. Accordingly, the time constant is made smaller, the behavior of the complementary MOS oscillating circuit for a high-frequency crystal oscillator is fully followed. A polycrystalline Si film 5 and a dielectric layer 4' immediately thereunder are also interwoven into the comb-shaped electrodes in parallel with the high-potential terminal 9'a for the formation of the external terminal 9'b into a comb-shaped, symmetrical configuration.



## LEGAL STATUS

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